

**REMARKS**

Claims 1-40 are pending in the above-identified application, with claims 13-40 being withdrawn from consideration as directed to a non-elected invention. Claims 1, 3-5, and 7-12 have been amended.

**Information Disclosure Statement**

Applicant has reviewed and agrees with the annotations to the Information Disclosure Statement made by the Examiner.

**Drawings**

In response to the objection to FIG. 14, Applicant has deleted reference number 30, as indicated in the accompanying replacement sheet.

**Specification**

The disclosure has been objected to because of the following informalities: The use of acronyms is acceptable, however, each should be spelled out at least at its first occurrence (MRP at page 6; TCP/IP at page 8. As indicated in the amendments to the specification set forth above, these terms have been defined at their first occurrence.

**Objection to the Claims**

Claims 2 and 4 have been objected to based on the assumption that financial planning system 400 performs the operations identified at steps 401-404. Nowhere in the specification of the above-identified application is it suggested that financial planning system 400 is involved in the performance of steps 401-404. Neither the sections in the specification referenced in the Office Action nor FIG. 13 include such a suggestion. It is merely coincidental that a 400's series number is used for both financial planning system 400 and steps 401-404. As such, Applicant respectfully requests withdrawal of the objection of claims 2 and 4.

Regarding the objection to claim 4 based on its dependency on claim 2, claim 4 has been amended to include the subject matter of claim 3 and claim 3 has been amended to include the subject matter of claim 4. Based on this change, Applicant submits that the objection to claim 4 has been overcome.

**Rejection under 35 U.S.C. § 102**

Claims 1 and 7-12 have been rejected under 35 U.S.C. § 102(b) as being anticipated by USP 5,953,707 to Huang et al. ("Huang"). Independent claims 1, 7, 9 and 11 have been amended to delete the language "at least one of" in part b) of these claims. As Huang is silent concerning the use of randomization techniques, these independent claims cannot be anticipated by Huang, and so Applicant requests favorable reconsideration of the rejection of these claims.

Claims 8, 10 and 12, and claim 5 as well (although not rejected here), are patentable as depending on allowable independent claims. Further, these dependent claims are also patentable as Huang does not teach or suggest adjusting shipment dates when excess inventory exists in the retail store for which forecasts are being generated in a replenishment shipment system that uses seasonal profile and randomization techniques. For these reasons, Applicant believes these claims are now in condition for allowance.

**Rejection under 35 U.S.C. § 103, Huang v. Willemain**

Claims 2, 4 (now claim 3 and referred to hereinafter as such) and 5 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Huang as applied to claim 1, and further in view of USP 6,205,431 to Willemain et al. ("Willemain").

Before discussing this rejection, some background information regarding the present invention and how it differs from Huang and Willemain may be helpful. The invention recited in the independent claims under examination is designed to determine time-phased sales forecasts and planned replenishment shipments for low-volume products sold at the retail store level. By determining aggregate demand for a product with time phasing using seasonal profiles and randomization techniques, the claimed invention avoids a serious problem in prior art systems, i.e., bunching up of the low-volume products during the first few time periods. This results in a distorted pattern of demand that adversely affects inventory at the retail store level, but also creates distortion of demand at the distribution center, and with respect to capacity requirements (labor hours), transportation requirements (weight and cube), and financial planning (planned purchases).

Applicant's claimed invention uses randomization in generating time-phased planned shipments so as to avoid distorted demand. This is not randomization of lead times. Rather it is

randomization of where to drop the forecasts so that the aggregate demand represents an accurate prediction of total demand at the distribution center and for other planning purposes such as capacity, transportation, financial planning and the like.

The portion of the Huang disclosure most relevant (albeit not particularly relevant) to the claimed invention is the VMR system the Examiner has referenced in the Office Action. The VMR system is a reorder point system, where a request for shipment of products is provided when inventory levels drop below some predetermined point, e.g., the safety stock level. Unlike the present invention, no forecasting occurs with conventional reorder point systems, and certainly no forecasting occurs using seasonal profile and randomization techniques. Conventional reorder point systems do not use time-phased planning.

The Huang disclosure is directed to methods of determining lead time to ensure delivery of a product by a specified date. Huang is not concerned with forecasting total aggregate demand at the retail store level and planning optimal replenishment shipments to such stores. As discussed more below, lead time determination, on the one hand, and forecasting aggregate demand and replenishment shipment dates using time-phased planning, on the other, are very different concepts.

Willemain discusses the use of randomization in connection with determining lead times. The Willemain system is not designed to determine time-phased planned shipments, with the associated impact on prediction of demand for products at the distribution center level and for capacity, transportation, purchasing and the like. In the field of distribution resource planning ("DRP"), these are two very different concepts.

Turning now to the rejection of claims 2 and 4, Applicant respectfully submits that lead time and "shipping time," which is presumed to mean shipment date insofar as "shipping time" is not used in the claims, are not the same. Indeed, they are very, very different concepts in the field of DRP. For this reason, taking Official Notice that these concepts are equivalent is not correct and runs afoul of the guidance in MPEP § 2144.03. As indicated in § 2144.03, "Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and

unquestionable demonstration as being well-known." Such an "instant and unquestionable demonstration" is not possible here as determination of lead time and forecasting replenishment shipment date are very different concepts in the art.

In justifying the combination of Huang and Willemain, the Office Action states that such combination would have been obvious "as a basis for determining the offset period or lead time." Applicant is not claiming the determination of lead time or offset period in the context of lead time determination. While this finding regarding the propriety of combining Huang and Willemain may be correct on a theoretical basis, it is not relevant here where lead time is not a focus of the present invention, and certainly is not being claimed. As such, the invention of claims 2 and 4 is not suggested by the Huang and Willemain combination.

Concerning claim 5, as amended, neither the Huang nor Willemain references address the concept of using excess inventory at the retail store in determining planned replenishment shipment dates. As such, this claim is patentable over Huang and Willemain.

As relates to the subject matter of claim 5 before amendment, and as relates more generally to independent claims 1, 7, 9 and 11, after amendment, the prior art does not teach or suggest the use of seasonal profiles AND randomization techniques in connection with time-phased sales forecasts and replenishment shipment dates planning in retail store supply chains. Neither the Huang nor Willemain systems are intended for use in retail store supply chains. Accordingly, while their discussion of lead time determination and use of randomization techniques in connection with determining lead time is interesting, it is not germane to the invention recited in claims 1, 7, 9 and 11. Thus, the comment in the Office Action with respect to claim 5, which is now relevant to claims 1, 7, 9 and 11 (as a result of the amendment of these claims to require the use of seasonal profiles AND randomization), that combination of Huang and Willemain would have been obvious "as a basis for determining the offset period or lead time" is not relevant, as discussed above. Indeed, using the randomized lead time and seasonal demand approaches of Willemain in combination with the teachings of Huang in the DRP logic context of the present invention would create the exact bunching problems the present invention is designed to overcome. This reality points out the fundamental differences between what Applicant is claiming and what is suggested in the Huang-Willemain combination. For these reasons, claims

1, 7, 9 and 11 are believed to be patentable over the Huang and Willemain references.

**Rejection under 35 U.S.C. § 103, Huang**

Claims 3 (now claim 4 and referred to as such hereinafter) and 6 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Huang. The Huang system does not perform forecasting with respect to replenishment shipments. Rather, the Huang system uses a reorder point system. As such, the results of the time-phased replenishment shipment planning, as recited in claim 4, are not achieved with the Huang-Willemain combination. Shipping out products when inventory runs low (as would occur with the reorder point systems of this combination), is not the same as forecasting when shipments should occur based on seasonal profile and randomization and then developing different shipment dates accordingly. For this reason, claim 3 is believed to be patentable.

Regarding claim 6, official notice has again been taken with regard to the rejection of claim 6. Here too, MPEP § 2144.03 makes it improper to base a rejection on official notice. The claimed invention does not feature the use of vendor managed replenishment systems, and so the difference between the claimed invention and the teachings of the Huang-Willemain combination are too great to gap fill with official notice. In addition, claim 6 is patentable because it depends on claim 1 which is patentable for the reasons discussed above.

**CONCLUSION**

In view of the foregoing, Applicant submits that claims 1-12 are in condition for allowance. Therefore, prompt issuance of a Notice of Allowance is respectfully requested. If any issues remain, the Examiner is encouraged to call the undersigned attorney at the number listed below.

Respectfully submitted,

THE RETAIL PIPELINE  
INTEGRATION GROUP

By: Lawrence H. Meier  
Lawrence H. Meier  
Registration No.: 31,446  
DOWNS RACHLIN MARTIN PLLC  
Customer No. 21918  
Tel: (802) 863-2375

BTv.481870.1

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**